

**CITY OF BELLEVUE
ENVIRONMENTAL SERVICES COMMISSION
MEETING MINUTES**

Thursday
November 5, 2009
6:30 p.m.

Conference Room 1E-112
Bellevue City Hall
Bellevue, Washington

COMMISSIONERS PRESENT: Chair Szablya, Commissioners Carter, Mach, Mahon, Roberts, Swenson

COMMISSIONERS ABSENT: Vice-Chair Helland

OTHERS PRESENT: Nav Otal, Joe Harbour, Don McQuilliams, Scott Taylor

MINUTES TAKER: Laurie Hugdahl

1. CALL TO ORDER:

The meeting was called to order by Chair Szablya at 6:30 p.m.

2. ORAL COMMUNICATIONS:

None.

3. APPROVAL OF AGENDA

Motion made by Commissioner Mach, seconded by Commissioner Mahon, to approve the agenda. Motion passed unanimously (6-0).

4. APPROVAL OF MINUTES

A. October 1, 2009 Regular Meeting Minutes

Vice-Chair Helland noted that the October 1, 2009 minutes should be corrected to reflect that he was absent. Commissioner Roberts asked for more consistency with names in the future (i.e. not Commissioner Roberts and Mr. Roberts, just Commissioner Roberts).

Motion made by Commissioner Mach, seconded by Commissioner Roberts, to approve the minutes as amended. Motion passed unanimously (6-0).

5. FOLLOW-UP QUESTIONS/ANSWERS

None.

6. REPORTS & SUMMARIES

A. ESC Calendar/Council Calendar

Ms. Otal reviewed the ESC Calendar and the Council Calendar.

At the December meeting the ESC will be discussing the 2010 Work Plan as well as the Solid Waste contract and the Bellevue Parks and Open Space System Plan update. She noted that there will not be a Council meeting on November 9. The mid biennial budget will be reviewed on November 16. There will be minimal changes to the utilities budget, just technical adjustments and possibly changes to water rates because of the fire hydrant issue.

Councilmember Davidson pointed out that there are five Mondays in November and the Council will be meeting on the fifth Monday, which is November 30.

B. Desk Packet Material (s)

- Conservation & Outreach Events & Volunteer Opportunities for November and December
- Ms. Otal discussed a unique opportunity for boards and commissions to participate in a web-based facilitated dialogue regarding the City's Parks and Open Space System Plan goals and objectives

C. Weather Preparedness Update

Joe Harbour, Operations Manager for Utilities, introduced Don McQuilliams, Surface Water Superintendent for Utilities, who went through the presentation on Winter Storms Preparedness. Mr. McQuilliams provided an overview of what the public can do to prepare themselves for winter weather.

The Utilities department's overall goal is to protect and mitigate impacts to public safety, property and the environment. To accomplish this goal they focus on operational objectives, which are to maintain, restore and provide transportation mobility to emergency services, keep up with essential water, sewer and drainage services, and provide public information and operation communications. They monitor weather forecasts 365 days a year so they are not caught off guard. Based on Bellevue-specific forecasts, they plan and prepare conservatively. For all weather events they have trucks and equipment well in advance of the need. They establish shifts for crews and are able to operate full-force around the clock if necessary. During weather events, response operations are adapted to best meet the needs of the communities we serve. There are

five shelters available in the city if they need to be activated. These are managed by the parks department and are opened on an as-needed basis.

Wind storms can result in widespread power outages, down power lines, fallen trees, limbs and debris that can interrupt the mobility and utility services. During wind storms the focus is on mobility and utility services. Operational objectives during wind storms are to support emergency services; provide access to critical facilities such as hospitals; maintain water and wastewater pump station operations, and to improve mobility via road closures and detours and to re-open streets as quickly as possible. To accomplish these objectives, emergency generators are set up ahead of time and fully tested at pump stations. If necessary they are prepared to activate a debris management plan assisting in collecting and getting rid of the debris from streets.

The focus during rain storms is to maintain mobility and prevent flooding. Operational objectives are to support the emergency service providers; to ensure access to critical facilities; maintain water and wastewater pump station operations; improve mobility; and prevent and mitigate flooding and environmental impacts.

During snow and ice the focus is on maintaining mobility. Operational objectives are to support emergency services; provide access to hospitals and other critical facilities; minimize impacts to morning and evening commutes; minimize impacts to schools; and maintain general mobility.

Bellevue has a unique situation in that it sits between two large lakes with the greatest elevation range in the region. We have some of the steepest streets in the urbanized part of the region. Weather can be punctuated by extreme citywide or localized storms. The impacts are unpredictable and highly variable throughout the city. Depending on the timing and type of storm it can be very hard to predict and hard to respond.

The focus for snow and ice is planning and preparing for storm events. The intent is to first ensure that emergency services can get into all quadrants of the city and that the critical facilities are accessible. They then strive to provide the most good for the most people as quickly as possible. Major arterials and commuter routes are plowed and sanded first along with primary neighborhood routes. This is part of the department's strategic, prioritized response. It is important for residents and businesses to be familiar with the snow response prioritization map so they can plan accordingly. The City has a variety of tactics to employ for snow and ice events. These may include anti-icing, plowing, sanding, and de-icing. The City has 40-50 trained plow operators with extensive equipment and resources available. Plans and strategies guide their options to respond to

snow and ice. Pre-event communications include open houses, BTV videos, “It’s Your City” article, media releases, and utility bill inserts.

During weather events communication is handled through press releases, media coverage, “Extreme Weather Response” page on the Utilities website, situation reports and the action plan. Residents can sign up on the city’s list serve to receive weather related updates.

Steps everybody should take to prepare for storms include preparing your home and supplies in the event that you are without power and can’t get to the store for three-to-seven days. Other steps include insulating pipes and hose bibs, keeping storm grates clear, removing snow from sidewalks, winterizing vehicles, carrying chains and knowing how to install them, preparing and planning ahead, knowing your route, and signing up for the extreme weather list service. Anyone with weather-related concerns can call 425-452-7840 at any time.

Questions:

Commissioner Roberts stated that there was a lot of concern last year about the slow pick-up of sand that was dumped on the roads. He asked if we have plans for additional sweepers or outside help this year. Mr. McQuilliams stated that they worked with the streets supervisor to try to get the sand picked up as soon as possible. They are prioritizing our response so that they pick up the sand closest to the major water bodies first, in order to prevent environmental impacts. The City has two sweeper trucks, and is looking at options for outsourcing additional sweeping.

Commissioner Roberts asked if they recycle the sand. Mr. McQuilliams said they could not recycle it since it has too many toxic substances in it.

Commissioner Mach referred to spots that get repeated flooding. He asked if there is a capacity issue for those areas. Mr. McQuilliams stated that there are two major spots in Bellevue that are prone to flooding. One of those areas is part of the Kelsey Creek Wetland where the road is lower than the flood plain. The other one on 148th south of Main Street is part of the Larson Lake Wetland System and is also in a flood plain.

Commissioner Roberts asked if all of the storm drains have been repaired from last year. Mr. Taylor noted that the Coal Creek Culvert is the main one that sustained some damage and it still needs some repairs. There was also some creek erosion on the Vasa Tributary. They are working with FEMA and the Corps to make repairs. Mr. McQuilliams stated that the City has a construction crew that makes these repairs during the summer. Repairs that cannot be performed by O&M are forwarded to Engineering for further review.

Commissioner Szablya asked if we have any mutual aid agreements. Mr. Harbour stated that Gene Schaffer is working with management here on agreements related to this. Ms. Otal added that there may be options for more informal smaller mutual aid agreements. There are older agreements with Seattle, Tacoma and Portland for large, extreme events. Those older agreements will be superseded by a new statewide agreement.

Commissioner Carter asked if we have reverse 911 capabilities. Ms. Otal said that we do. Commissioner Carter asked if we could use a localized version of this to tell people about emergency events. Mr. McQuilliams stated that it has been used in a focused way for flooding or power failures.

Mr. McQuilliams noted that there is a drainage system map available tonight as well.

The commission thanked Mr. McQuilliams for the presentation.

Chair Szablya reminded the Commission that the next topic was just about the Coal Creek culvert and they needed to limit the discussion to just the culvert and engineering or technical issues.

D. Coal Creek Culvert Project

Mr. Taylor showed a video example of how a blocked culvert could cause destruction of a roadway in just a few minutes.

Mr. Taylor reviewed the location of the Coal Creek Culvert Project area. He discussed the following reasons for replacement:

- ◆ Inlet damage from previous flood events
- ◆ Rust perforations in invert
- ◆ Structural evaluation shows that it has a useful life of 5 to 10 years
- ◆ Prefer to have a planned replacement to minimize impacts
- ◆ Protect public safety and utility infrastructure
- ◆ Environmental stewardship – the culvert is a partial fish passage barrier. There are plans to replace it with one which is more fish-friendly.
- ◆ A photo comparing 1993 to 2008 shows erosion, temporary repairs, significant deformation and damage to the entrance to the culvert.
- ◆ Another photo showed December 2007 flood damage which has been repaired.

One of the main challenges with this project is traffic. There are 26,000 average daily trips. This is a regional arterial with not many alternative

routes; most alternate routes involve travelling through neighborhoods. There are limited traffic control options.

Other challenges are:

- ◆ Utility conflicts, relocations and limitations
- ◆ Overhead power
- ◆ 20-inch petroleum and 16 inch petroleum
- ◆ 12 inch high pressure natural gas transmission line
- ◆ Fiber optics duct bank
- ◆ King County sewer trunk line (Coal Creek interceptor)

Mr. Taylor displayed a graphic which showed the transmission lines, the 16- and 20-inch petroleum lines, high pressure natural gas lines, and the interceptor sanitary sewer which crosses it.

Additionally, environmental challenges include wetlands, riparian areas, flood plains, stream alignment, wildlife corridor connection, and fish passage.

Design alternatives were then discussed. Repair was considered, but is really only a stop gap measure. The culvert has so much rust and damage from previous storms that it is not in a condition that will have a lasting repair. Also, any repair that is done must meet Hydraulic Code requirements for fish passage. Culvert options include a 4-sided box or 3-sided box. From a regulatory perspective, the installation of smaller multiple barrels are strongly discouraged.

Bridge options include a precast girder and cast-in-place deck; a precast deck planking between abutments; and precast full span segments. Advantages of bridges are that you are able to simulate natural conditions and preserve riparian functions.

There are many regulatory requirements related to this project. Permits required include: US Army Corps of Engineers Section 404, WDFW Hydraulic Project Approval, SEPA and Critical Areas Ordinance. The tribes have the ability to insert their tribal treaty concerns into the process. They are very good at asserting their treaty rights. Additionally, there is a limited time to do in-stream work. The fish window for construction is from mid June to mid September.

There are also Fish Passage Requirements regarding biological limiting factors. There are fish passage design criteria for culvert installations as applied statewide in the WAC 220-110-070. The Commission expressed significant concern about the WAC criteria for structures that are built in the stream. Hydraulics dictates that you need to maintain open channel conditions, with less than maximum velocity (4 feet per second), and

greater than minimum depth (1 foot). Controlling variables include flow, cross section, roughness, and slope. A rule of thumb is: Keep it slow and deep.

Hydrology (WAC 220-110-070):

- High flow design: 10 year flow at 90% of the time (maximum velocity criteria)
- Low Flow Design – 2 year, 7 day low flow (minimum depth criteria)

Evaluation criteria includes cost; traffic impacts; utility conflicts, relocations, and limitations; construction duration; environmental impacts; and social impacts. There will be a large focus on minimizing impacts by minimizing the disturbance footprint, minimizing the utility relocations, utilizing communication and outreach, and examining all possible construction alternatives. The City has selected CH2M Hill for this project and is currently monitoring conditions of the culvert. The preliminary schedule looks like utilities will relocate in 2011 or 2012 with construction anticipated in 2012 or 2013. Mr. Taylor noted that the two petroleum pipelines maintained by Olympic provide fuel to both Portland and SeaTac. If they have to relocate them it will be just one pipeline at a time.

Commissioner Roberts recommended closing the roadway at Forest Drive and up past Safeway. Mr. Taylor expressed concern that this would force people into other routes. Chair Szablya suggested closing the road at 69th closer to Safeway. There was discussion about alternatives.

Councilmember Davidson pointed out that the CIP is broke, but the utilities department has the ability to use rates as a source of funding.

Chair Szablya expressed appreciation for the presentations. He acknowledged that there are significant challenges associated with this. He commented that it is important to keep the riparian areas open although he noted that there are other places in the city where they are not currently open and the city has not done anything about it.

Next steps include negotiating a scope and fee with CH2M Hill and their project team. Staff is also working with Olympic Pipeline to find out the exact location of their facilities. This will help the City examine the feasibility of all alternatives.

Commissioner Roberts asked if there is any way we could do this whole thing just by tunneling and not disturbing the road surface. Mr. Taylor said he wasn't familiar with a tunneling option, but they could look into it. There was significant discussion about the issues associated with the pipelines. Commissioner Roberts spoke in support of closing the roadway altogether to allow for construction on both lanes at the same time.

The Commission thanked staff for the detailed information in the presentation.

7. NEW BUSINESS

None

8. DIRECTOR'S OFFICE REPORT

2010 Work Plan – Staff is looking at the items they will be bringing to the ESC for its consideration. Ms. Otal suggested that members of the ESC let her know if they have additional topics of interest they would like to see on the Work Plan

9. CONTINUED ORAL COMMUNICATIONS

None

10. EXECUTIVE SESSION

None

11. ADJOURNMENT

Motion made by Commissioner Swenson, seconded by Commissioner Roberts, to adjourn the meeting at 7:50 p.m. Motion carried unanimously (6-0).